

Bay Area Air Quality Management District

939 Ellis Street
San Francisco, CA 94109
(415) 771-6000

Proposed

MAJOR FACILITY REVIEW PERMIT

Issued To:

**Integrated Environmental Systems, Inc.
Facility #A1996**

Facility Address:

499 High Street
Oakland, CA 94601

Mailing Address:

499 High Street
Oakland, CA 94601

Responsible Official

Richard Stryker, General Manager
510-261-1512

Facility Contact

Richard Stryker, General Manager
510-261-1512

Type of Facility: Medical Waste Treatment Facility

Primary SIC: 4953

Product: [Not applicable]

BAAQMD Permit Division Contact:

Donald P. Van Buren, PE

ISSUED BY THE BAY AREA AIR QUALITY MANAGEMENT DISTRICT

Ellen Garvey, Executive Officer/Air Pollution Control Officer

Date

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I. STANDARD CONDITIONS

A. Administrative Requirements

The permit holder shall comply with all applicable requirements in the following regulations:

BAAQMD Regulation 1 - General Provisions and Definitions

(as amended by the District Board on 10/7/98);

SIP Regulation 1 - General Provisions and Definitions

(as approved by EPA through 8/27/99);

BAAQMD Regulation 2, Rule 1 - Permits, General Requirements

(as amended by the District Board on 10/7/98);

SIP Regulation 2, Rule 1 - Permits, General Requirements

(as approved by EPA through 2/25/99);

BAAQMD Regulation 2, Rule 2 - Permits, New Source Review

(as amended by the District Board on 10/7/98);

SIP Regulation 2, Rule 2 - Permits, New Source Review and Prevention of Significant Deterioration

(as approved by EPA through 2/25/99);

BAAQMD Regulation 2, Rule 4 - Permits, Emissions Banking

(as amended by the District Board on 10/7/98); and

SIP Regulation 2, Rule 4 - Permits, Emissions Banking

(as approved by EPA through 2/25/99).

B. Conditions to Implement Regulation 2, Rule 6, Major Facility Review

1. This Major Facility Review Permit expires on [when issued, enter 5th anniversary of issue date]. The permit holder shall submit a complete application for renewal of this Major Facility Review Permit no later than [when issued, enter date 6 months prior to permit expiration date] and no earlier than [when issued, enter date 12 months prior to expiration date]. **If a complete application for renewal has not been submitted in accordance with these deadlines, the facility may not operate after** [when issued, enter 5th anniversary of issue date]. (Regulation 2-6-307, 404.2, & 409.6; MOP Volume II, Part 3, §4.2)
2. The permit holder shall comply with all conditions of this permit. The permit consists of this document and all appendices. Any non-compliance with the terms and conditions of this permit will constitute a violation of the law and will be grounds for enforcement action; permit termination, revocation and re-issuance, or modification; or denial of a permit renewal application. (Regulation 2-6-307; MOP Volume II, Part 3, §4.11)
3. In the event any enforcement action is brought as a result of a violation of any term or condition of this permit, the fact that it would have been necessary for the permittee to halt or reduce the permitted activity in order to maintain compliance with such term or condition shall not be a defense to such enforcement action. (MOP Volume II, Part 3, §4.11)
4. This permit may be modified, revoked, reopened and reissued, or terminated for

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cause. (Regulation 2-6-307, 409.8, 415; MOP Volume II, Part 3, §4.11)

I. Standard Conditions

5. The filing of a request by the facility for a permit modification, revocation and re-issuance, or termination, or of a notification of planned changes or anticipated non-compliance does not stay the applicability of any permit condition. (Regulation 2-6-409.7; MOP Volume II, Part 3, §4.11)
6. This permit does not convey any property rights of any sort, nor any exclusive privilege. (Regulation 2-6-409.7; MOP Volume II, Part 3, §4.11)
7. The permit holder shall supply within 30 days any information that the District requests in writing to determine whether cause exists for modifying, revoking and reissuing, or terminating the permit or to determine compliance with the permit. (Regulation 1-441, Regulation 2-6-409.4 & 501; MOP Volume II, Part 3, §4.11)
8. Any records required to be maintained pursuant to this permit which the permittee considers to contain proprietary or trade secret information shall be prominently designated as such. Copies of any such proprietary or trade secret information which are provided to the District shall be maintained by the District in a locked confidential file, provided, however, that requests from the public for the review of any such information shall be handled in accordance with the District's procedures set forth in Section 11 of the District Administrative Code. (Regulation 2-6-419; MOP Volume II, Part 3, §4.11)
9. Proprietary or trade secret information provided to EPA will be subject to the requirements of 40 CFR Part 2, Subpart B - Public Information, Confidentiality of Business Information. (40 CFR Part 2)
10. The emissions inventory submitted with the application for this Major Facility Review Permit is an estimate of actual emissions for the time period stated and is included only as one means of determining applicable requirements for emission sources. It does not establish, or constitute a basis for establishing, any new emission limitations. (MOP Volume II, Part 3, §4.11)

C. Requirement to Pay Fees

The permit holder shall pay annual fees in accordance with District Regulation 3, including Schedule P. (Regulation 2-6-402 & 409.13, Regulation 3; MOP Volume II, Part 3, §4.12)

D. Inspection and Entry

Access to Facility: The permit holder shall provide reasonable access to the facility and equipment which is subject to this permit to the APCO and/or to his or her designee. (Regulation 1-440, Regulation 2-6-409.3; MOP Volume II, Part 3, §4.14)

E. Records

Notwithstanding the specific wording in any requirement, all records for federally enforceable requirements shall be maintained for at least five years from the date of entry. (Regulation 2-6-501, Regulation 3; MOP Volume II, Part 3, §4.7)

F. Monitoring Reports

All required monitoring reports must be submitted to the District at least once every six months, except where an applicable requirement specifies more frequent reporting.

I. Standard Conditions

All instances of non-compliance shall be clearly identified in these reports. The reports shall be certified by the responsible official as true, accurate, and complete. In addition, all instances of non-compliance with the permit shall be reported in writing to the District's Compliance and Enforcement Division within 10 calendar days of the discovery of the incident. Within 30 calendar days of the discovery of any incident of non-compliance, the facility shall submit a written report including the probable cause of non-compliance and any corrective or preventative actions. The reports shall be sent to the following address:

Director of Compliance and Enforcement
Bay Area Air Quality Management District
939 Ellis Street
San Francisco, CA 94109
Attn: Title V Reports

(Regulation 2-6-502, Regulation 3; MOP Volume II, Part 3, §4.7)

G. Compliance Certification

Compliance certifications shall be submitted annually by the responsible official of this facility to the Bay Area Air Quality Management District and to the Environmental Protection Agency. The certification must list each applicable requirement, the compliance status, whether compliance was continuous or intermittent, the method used to determine compliance, and any other specific information required by the permit. The permit holder may satisfy this requirement through submittal of District-generated Compliance Certification forms. The certification should be directed to the District's Compliance and Enforcement Division at the address above, and a copy of the certification should be sent to the Environmental Protection Agency at the following address:

Director of the Air Division
USEPA, Region IX
75 Hawthorne Street
San Francisco, CA 94105
Attention: Air-3

(MOP Volume II, Part 3, §4.5 and 4.15)

H. Emergency Provisions

1. The permit holder may seek relief from enforcement action in the event of a breakdown, as defined by Regulation 1-208 of the District's Rules and Regulations, by following the procedures contained in Regulations 1-431 and 1-432. The District will thereafter determine whether breakdown relief will be granted in accordance with Regulation 1-433. (MOP Volume II, Part 3, §4.8)

I. Standard Conditions

2. The permit holder may seek relief from enforcement action for a violation of any of the terms and conditions of this permit caused by conditions beyond the permit holder's reasonable control by applying to the District's Hearing Board for a variance pursuant to Health and Safety Code Section 42350. The Hearing Board will determine after notice and hearing whether variance relief should be granted in accordance with the procedures and standards set forth in Health and Safety Code Section 42350 et seq. Any variance granted by the Hearing Board from any term or condition of this permit which lasts longer than 90 days will be subject to EPA approval. (MOP Volume II, Part 3, §4.8)
3. Notwithstanding the foregoing, the granting by the District of breakdown relief or the issuance by the Hearing Board of a variance will not provide relief from federal enforcement unless the Major Facility Review Permit has been modified pursuant to Regulation 2, Rule 6. (MOP Volume II, Part 3, §4.8)

I. Severability

In the event that any provision of this permit is invalidated by a court or tribunal of competent jurisdiction, or by the Administrator of the EPA, all remaining portions of the permit shall remain in full force and effect. (Regulation 2-6-409.5; MOP Volume II, Part 3, §4.10)

II. EQUIPMENT

Table II A - Permitted Sources

Each of the following sources has been issued a permit to operate pursuant to the requirements of BAAQMD Regulation 2, Permits.

S-#	Description	Make or Type	Model	Capacity
S5	Medical Waste Incinerator (natural gas)	ThermTec	AR-1250- 2-2-144Q	1,000 pounds of waste per hour
S6	Medical Waste Incinerator (natural gas)	ThermTec	AR-1250- 2-2-144Q	1,000 pounds of waste per hour

Table II B - Abatement Devices

A-#	Description	Source(s) Controlled	Applicable Requirement	Operating Parameters	Limit or Efficiency
A6	Evaporative Cooler, ThermTec EC-1250	S5	BAAQMD Condition 13534, Part 20 (a) (5)	Maximum baghouse inlet temperature	455 °F
A7	Dry Sorbent Injection System plus Fabric Filter, ThermTec Model 144-12 Dry Sorbent Injection/ Fabric Filter Air Pollution Control System	A6	BAAQMD Condition 13534, Part 20 (a) (1)	Minimum carbon sorbent flow rate	3.0 lb/hr
			BAAQMD Condition 13534, Part 20 (a) (2)	Minimum lime sorbent flow rate	33.0 lb/hr
			BAAQMD Condition 13534, Part 16 (b) (1)	opacity	< 5% hourly basis; and no more than 3 min/hr in excess of 10%
A31	Evaporative Cooler, ThermTec EC-1250	S6	Same as A-6	Same as A-6	Same as A-6

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Table II B - Abatement Devices

A-#	Description	Source(s) Controlle d	Applicable Requirement	Operating Parameters	Limit or Efficiency
A32	Dry Sorbent Injection System plus Fabric Filter, ThermTec Model 144-12 Dry Sorbent Injection/ Fabric Filter Air Pollution Control System	A31	Same as A-7	Same as A-7	Same as A-7

III. GENERALLY APPLICABLE REQUIREMENTS

The permit holder shall comply with all applicable requirements, including those specified in the BAAQMD and SIP Rules and Regulations and other federal requirements cited below. These requirements apply in a general manner to the facility and/or to sources exempt from the requirement to obtain a District Permit to Operate. The District has determined that these requirements would not be violated under normal, routine operations, and that no additional periodic monitoring or reporting to demonstrate compliance is warranted. In cases where a requirement, in addition to being generally applicable, is also specifically applicable to one or more sources, the requirement and the source are also included in Section IV, Source-Specific Applicable Requirements, of this permit.

The dates in parenthesis in the Title column identify the versions of the regulations being cited and are, as applicable:

1. BAAQMD regulation(s): The date(s) of adoption or most recent amendment of the regulation by the District Board
2. Any federal requirement, including a version of a District regulation that has been approved into the SIP: The most recent date of EPA approval of any portion of the rule, encompassing all actions on the rule through that date

Where an applicable requirement is a SIP requirement, the full language of the SIP requirement is included in Appendix A of this permit.

NOTE:

There are differences between the current BAAQMD rule and the version of the rule in the SIP. For specific information, contact the District's Rule Development Section of the Enforcement Division. All sources must comply with both versions of the rule until US EPA has reviewed and approved (or disapproved) the District's revision of the regulation.

Table III
Generally Applicable Requirements

Applicable Requirement	Regulation Title or Description of Requirement	Federally Enforceable (Y/N)
BAAQMD Regulation 1	General Provisions and Definitions (10/7/98)	N
SIP Regulation 1	General Provisions and Definitions (8/27/99)	Y
BAAQMD Regulation 4	Air Pollution Episode Plan (3/20/91)	N
SIP Regulation 4	Air Pollution Episode Plan (8/06/90)	Y

III. Generally Applicable Requirements

Table III
Generally Applicable Requirements

Applicable Requirement	Regulation Title or Description of Requirement	Federally Enforceable (Y/N)
BAAQMD Regulation 5	Open Burning (11/2/94)	N
BAAQMD Regulation 6	Particulate Matter and Visible Emissions (12/19/90)	N
BAAQMD Regulation 7	Odorous Substances (3/17/82)	N
BAAQMD Regulation 8, Rule 1	Organic Compounds - General Provisions (6/15/94)	Y
BAAQMD Regulation 8, Rule 3	Organic Compounds - Architectural Coatings (12/20/95)	Y
BAAQMD Regulation 8, Rule 49	Organic Compounds - Aerosol Paint Products (12/20/95)	N
SIP Regulation 8, Rule 49	Organic Compounds - Aerosol Paint Products (3/22/95)	Y
BAAQMD Regulation 8, Rule 51	Organic Compounds - Adhesive and Sealant Products (12/20/95)	N
BAAQMD Regulation 11, Rule 2	Hazardous Pollutants - Asbestos Demolition, Renovation and Manufacturing (12/4/91)	Y
BAAQMD Regulation 12, Rule 4	Miscellaneous Standards of Performance - Sandblasting (7/11/90)	Y

IV. SOURCE-SPECIFIC APPLICABLE REQUIREMENTS

The permit holder shall comply with all applicable requirements, including those specified in the BAAQMD and SIP Rules and Regulations and other federal requirements cited below. The requirements cited in the following tables apply in a specific manner to the indicated source(s).

The dates in parenthesis in the Title column identify the versions of the regulations being cited and are, as applicable:

1. BAAQMD regulation(s): The date(s) of adoption or most recent amendment of the regulation by the District Board
2. Any federal requirement, including a version of a District regulation that has been approved into the SIP: The most recent date of EPA approval of any portion of the rule, encompassing all actions on the rule through that date

The full text of each permit condition cited is included in Section VI, Permit Conditions, of this permit. Additionally, where an applicable requirement is a SIP requirement, the full language of the SIP requirement is included in Appendix A of this permit. All other text may be found in the regulations themselves.

Table IV - A
Source-specific Applicable Requirements
S5 AND S6 - Medical Waste Incinerators

Applicable Requirement	Regulation Title or Description of Requirement	Federally Enforceable (Y/N)	Future Effective Date
BAAQMD Regulation 1	General Provisions and Definitions (10/7/98)		
1-522	Continuous Emission Monitoring and Recordkeeping Procedures	Y	
1-523	Parametric Monitoring and Recordkeeping Procedures	Y	
1-602	Area and Continuous Emission Monitoring Requirements	Y	
BAAQMD Regulation 2, Rule 1	Regulation 2, Rule 1 - Permits, General Requirements (10/7/98)		
2-1-403	Permit Conditions	Y	
2-1-501	Monitors	Y	

IV. Source-specific Applicable Requirements

Table IV - A
Source-specific Applicable Requirements
S5 AND S6 - Medical Waste Incinerators

Applicable Requirement	Regulation Title or Description of Requirement	Federally Enforceable (Y/N)	Future Effective Date
BAAQMD Regulation 6	Particulate Matter and Visible Emissions (12/19/90)		
6-301	Ringelmann Number 1 Limitation	Y	
6-302	Opacity Limitations	Y	
6-305	Visible Particles	Y	
6-310	Particulate Weight Limitation	Y	
6-310.1	Incineration or Salvage Operations	Y	
6-311	General Operations	Y	
6-401	Appearance of Emissions	Y	
6-501	Sampling Facilities and Instruments Required	Y	
6-502	Data, Records and Reporting	Y	
6-601	Particulate Matter, Sampling, Sampling Facilities, Opacity Instruments and Appraisal of Visible Emissions	Y	
BAAQMD Regulation 9, Rule 1	Inorganic Gaseous Pollutants, Sulfur Dioxide (3/15/95)		
9-1-301	Limitations on Ground Level Concentrations	Y	
9-1-302	General Emission Limitation	Y	
BAAQMD Regulation 11, Rule 1	Lead (3/17/82)		
11-1-301	Daily Limitation	Y	
11-1-302	Ground Level Concentration Without Background	Y	
BAAQMD Regulation 11, Rule 13	Hazardous Pollutants – Medical Waste Incinerators (1/16/91)	N	
11-13-301	Emission Limitation	N	
11-13-302	Operating Requirements	N	
11-13-302.1	Flue gas temperature limitation	N	
11-13-302.2	Primary and secondary chamber temperature limitations	N	
11-13-302.3	Minimum residence time	N	
11-13-302.4	Ash handling requirements	N	
11-13-403	Demonstration of Compliance	N	

IV. Source-specific Applicable Requirements

Table IV - A
Source-specific Applicable Requirements
S5 AND S6 - Medical Waste Incinerators

Applicable Requirement	Regulation Title or Description of Requirement	Federally Enforceable (Y/N)	Future Effective Date
11-13-404	Operator Certification	N	
11-13-501	Monitoring	N	
11-13-501.1	Primary and secondary chamber temperature monitoring	N	
11-13-501.2	Carbon monoxide CEM	N	
11-13-501.3	Sorbent feedrate and baghouse inlet temperature monitoring	N	
11-13-501.4	Waste charge monitoring	N	
11-13-501.5	Stack opacity monitoring	N	
11-13-502	Recordkeeping	N	
BAAQMD Manual of Procedures, Volume V	Continuous Emission Monitoring Policy and Procedures (1/20/82)	Y	
40 CFR 62, Subpart HHH	Federal Plan Requirements for Hospital/Medical/Infectious Waste Incinerators Constructed On or Before June 20, 1996	Y	
62.14400	Applicability	Y	
62.14411	Emission Limits	Y	Upon adoption
62.14412	Opacity Limit	Y	Upon adoption
62.14413	Startup, shutdown, and malfunction	Y	Upon adoption
62.14420	Requirement for Trained and Qualified Operators	Y	Upon adoption
62.14421	Training and Qualification	Y	Upon adoption
62.14422	Requirements for non-state training courses	Y	Upon adoption
62.14423	Requirements for operators in non-state training courses	Y	Upon adoption
62.14424	Maintenance of documentation	Y	Upon adoption

IV. Source-specific Applicable Requirements

Table IV - A
Source-specific Applicable Requirements
S5 AND S6 - Medical Waste Incinerators

Applicable Requirement	Regulation Title or Description of Requirement	Federally Enforceable (Y/N)	Future Effective Date
62.14425	Documentation review	Y	Upon adoption
62.14430	Requirement for Waste Management Plan	Y	Upon adoption
62.14431	Specifications for waste management plan	Y	Upon adoption
62.14432	Deadline for waste management plan	Y	Upon adoption
62.14451	Performance Test Requirements	Y	Upon adoption
62.14452	Test Methods	Y	Upon adoption
62.14453 (a)	Monitoring Requirements (What to monitor)	Y	Upon adoption
62.14454	Monitoring Requirements (How to monitor)	Y	Upon adoption
62.14455	Operation Outside of a Parameter Limit	Y	Upon adoption
62.14460	Recordkeeping	Y	Upon adoption
62.14461	Maintenance of records for five years	Y	Upon adoption
62.14462	Records onsite in paper copy or computer readable format	Y	Upon adoption
62.14463	Reporting requirements	Y	Upon adoption
62.14464	Reporting deadlines	Y	Upon adoption
62.14465	Signature of facilities manager	Y	Upon adoption
62.14470 (a)	Compliance Schedule	Y	Upon adoption

IV. Source-specific Applicable Requirements

Table IV - A
Source-specific Applicable Requirements
S5 AND S6 - Medical Waste Incinerators

Applicable Requirement	Regulation Title or Description of Requirement	Federally Enforceable (Y/N)	Future Effective Date
62.14480	Title V Permit Requirement	Y	Upon adoption
BAAQMD Condition #13534	Permit to Operate Condition	Y	
Part 1	Not all wastes authorized. [Regulation 1-103]	Y	
Part 2	Medical wastes and other special wastes authorized [CEQA]	N	
Part 3	Waste management plan required (Basis: 40 CFR 62, Subpart HHH, 62.14430 and 62.14431)	Y	
Part 4	Incinerator operator training and qualification requirements (Basis: 40 CFR 62, Subpart HHH, 62.14420 through 62.14425)	Y	
Part 5	Notification requirements and prohibition of waste feed during a bypass. (Basis: Reg 1-441)	Y	
Part 6	Offsets may be required (Basis: Cumulative increase, Emission Offsets)	Y	
Part 7	Putrescible waste handling agreement (Basis: Reg 1-301)	N	
Part 8	Putrescible waste disposal contingency plan requirement (Basis: Reg 1-301)	N	
Part 9	Polytetrafluoroethylene (PTFE) lined baghouse bags or equivalent required (Basis: BACT, TBACT)	Y	
Part 10	Maintenance record keeping (Basis: Reg 1-441, 40 CFR 62, Subpart HHH, 62.14460)	Y	
Part 11	Quench tower to use city water (Basis: Cumulative increase, BACT, TBACT)	Y	
Part 12	Supplemental fuel limited to natural gas. (Basis: Cumulative increase, BACT, TBACT)	Y	
Part 13	Minimum 1400 F primary combustion chamber temperature required (Basis: Reg 11-13-302)	N	
Part 14	Minimum 1800 F average and 1650 F absolute secondary combustion chamber temperature required (Basis: TBACT, 40 CFR 62, Subpart HHH, Table 3)	Y	
Part 15	Cancer risk not to exceed 10 in a million (Basis: Risk Management Policy, TBACT)	N	

IV. Source-specific Applicable Requirements

Table IV - A
Source-specific Applicable Requirements
S5 AND S6 - Medical Waste Incinerators

Applicable Requirement	Regulation Title or Description of Requirement	Federally Enforceable (Y/N)	Future Effective Date
Part 16 (a)(1)	Incinerator stack opacity not to exceed a 5 percent opacity average or a No. 0.5 on the Ringelmann Chart. (Basis: TBACT)	N	
Part 16 (a)(2)	plus no visible emissions from ash handling or storage (Basis: TBACT, Cumulative Increase)	Y	
Part 16 (b) (1)	PM emission limit of 30 mg/dscm at 7% O ₂ . (Basis: TBACT)	N	
Part 16 (b) (2)	CO emission limit of 40 ppm _{dv} at 7% O ₂ . (Basis: BACT)	Y	
Part 16 (b) (3)	Dioxin/furan emission limit of 10 nanograms CDD/CDF TEQ per kg of waste and 80 nanograms per dscm total CDD/CDF at 7% O ₂ or 1.9 nanograms CDD/CDF TEQ at 7% O ₂ . (Basis: TBACT)	N	
Part 16 (b) (4)	HCl emission limit of 100 ppm _{dv} at 7% O ₂ . (Basis: TBACT, 40 CFR 62, Subpart HHH, Table 1)	Y	
Part 16 (b) (5)	SO ₂ emission limit of 45 ppm _{dv} at 7% O ₂ . (Basis: BACT)	Y	
Part 16 (b) (6)	NO _x emission limit of 210 ppm _{dv} at 7% O ₂ . (Basis: BACT)	Y	
Part 16 (b) (7)	Lead emission limit of 0.10 mg/dscm at 7% O ₂ . (Basis: TBACT)	N	
Part 16 (b) (8)	Cadmium emission limit of 0.05 mg/dscm at 7% O ₂ . (Basis: TBACT)	N	
Part 16 (b) (9)	Mercury emission limit of 0.47 mg/dscm Hg at 7% O ₂ or 85% reduction. (Basis: TBACT)	N	
Part 17	Compliance Testing and Monitoring (Basis: Reg 1-420 and 600, Reg 11-13-501, AB 2588, 40 CFR 62, Subpart HHH, 62.14451 through 62.14453)	Y	
Part 18	Additional testing for AB 2588 compounds (Basis: Risk Management Policy, AB 2588)	N	
Part 19	Source test notification (Basis: Reg 1-600)	Y	
Part 20 (a)(1)	Minimum activated carbon flow rate of 3.0 lbs/hr: (TBACT, 40 CFR 62, Subpart HHH, Table 3)	Y	
Part 20 (a)(2)	Minimum lime flow rate of 33.0 lbs/hr: (TBACT, 40 CFR 62, Subpart HHH, Table 3)	Y	

IV. Source-specific Applicable Requirements

Table IV - A
Source-specific Applicable Requirements
S5 AND S6 - Medical Waste Incinerators

Applicable Requirement	Regulation Title or Description of Requirement	Federally Enforceable (Y/N)	Future Effective Date
Part 20 (a)(3)	Maximum hourly charge rate of 950 lbs/hr: (TBACT, 40 CFR 62, Subpart HHH, Table 3)	Y	
Part 20 (a)(4)	Minimum secondary combustion chamber temperature of 1800 F. (TBACT, 40 CFR 62, Subpart HHH, Table 3)	Y	
Part 20 (a)(5)	Maximum baghouse inlet temperature of 455 F (TBACT, 40 CFR 62, Subpart HHH, Table 3)	Y	
Part 20 (b)	Violation of CDD/CDF standard if baghouse inlet temperature or charge rate too high or sorbent flow rate too low (TBACT, 40 CFR 62, Subpart HHH, Table 3)	Y	
Part 20 (c)	Violation of HCl standard if charge rate too high or sorbent flow rate too low (TBACT, 40 CFR 62, Subpart HHH, Table 3)	Y	
Part 20 (d)	Violation of Hg standard if charge rate too high or sorbent flow rate too low (TBACT, 40 CFR 62, Subpart HHH, Table 3)	Y	
Part 20 (e)	Violation of above standards if bypass stack is used (Reg 1-441, Reg 2-6-501, TBACT, 40 CFR 62, Subpart HHH, 60.14455)	Y	
Part 21 (a)	Monitors required (Basis: 40 CFR 62, Subpart HHH, 62.14460 through 62.14465, Regulation 11-13-404)	Y	
Part 21 (b)	Monitor calibration required (Basis: 40 CFR 62, Subpart HHH, 62.14460 through 62.14465, Regulation 11-13-404)	Y	
Part 21 (c)	Monitor data required (Basis: 40 CFR 62, Subpart HHH, 62.14460 through 62.14465, Regulation 11-13-404)	Y	
Part 21 (d)	Record keeping requirements (Basis: 40 CFR 62, Subpart HHH, 62.14460 through 62.14465, Regulation 11-13-404)	Y	
Part 21 (e)	Reporting requirements (Basis: 40 CFR 62, Subpart HHH, 62.14460 through 62.14465, Regulation 11-13-404)	Y	

V. SCHEDULE OF COMPLIANCE

The permit holder shall comply with all applicable requirements cited in this permit. The permit holder shall also comply with applicable requirements that become effective during the term of this permit.

VI. PERMIT CONDITIONS

Any condition that is preceded by an asterisk is not federally enforceable.

Condition # 13534

For S5 and S6, Medical Waste Incinerators

1. Nothing in these conditions shall be construed to allow incineration of any material which is ~~otherwise~~ prohibited from incineration under local, State, or Federal law. (Basis: Regulation 1-103)
2. Integrated Environmental Systems (IES) may incinerate medical waste as defined by the California Medical Waste Management Act, California Health & Safety Code Section 117600 et seq. as well as other materials described in IES application for and allowed by its medical waste permit for incineration issued by the California Department of Health Services on October 20, 1992 (including but not limited to conditionally exempt controlled substances as defined at 22 California Code of Regulations Section 66261.4, and regulated garbage from ships and aircraft as defined at 7 Code of Federal Regulations Section 330.400 and 9 Code of Federal Regulations Section 94.5), and as amended from time to time, and as represented in corresponding California Environmental Quality Act documentation. (Basis: CEQA)
3. Within 6 months of issuance of the Major Facility Review permit, IES shall prepare and maintain a waste management plan that conforms with the requirements listed in 40 CFR 62, Paragraph 62.14431 of subpart HHH. This plan shall be made available for inspection upon request by District personnel. (Basis: 40 CFR 62, Subpart HHH, 62.14430 and 62.14431)
4. Incinerator operator training and qualification shall meet the requirements listed in 40 CFR 62, Paragraph 62.14420 through 62.14425 of Subpart HHH. (Basis: 40 CFR 62, Subpart HHH, 62.14420 through 62.14425)

VI. Permit Conditions

- ~~355~~. IES shall notify the District immediately, with due regard for public safety, including the hazard of fire and explosion, whenever emissions resulting from the incineration of medical waste or other materials are released into the atmosphere through the bypass stack of either S-5 or S-6. ~~This condition shall not apply when only natural gas is being combusted.~~ Any charging of waste during a bypass condition is prohibited. IES shall notify the District within one hour of determining that any CEM, COM, or parametric monitor is inoperable. These notifications shall be directed to the Director of the Enforcement & Compliance Division by fax on a form approved by the Director of Enforcement and Compliance Division. (Basis: Reg 1-441)
- ~~306~~. In accordance with the provisions of Regulation 2, Rule 4, should the facility precursor organic compound (POC) or nitrogen oxides (NOx) emissions ever equal or exceed 50 tons per year, on a pollutant specific basis, the facility owner/operator shall reimburse the District with emission reduction credits for all offsets of that pollutant provided from the District Small Facility Banking Account or its predecessor, the Small Facility Bank. (Basis: Cumulative increase, Emission Offsets)
- ~~*277~~. To prevent the release of odorous emissions, putrescible wastes, including but not limited to medical waste and ship garbage, intended to be incinerated shall ~~only~~ be managed in accordance with the conditions of a valid compliance agreement or other approval issued by the United States Department of Agriculture, and the requirements of 7 CFR ~~code of Federal Regulations~~ Section 330.400 and 9 CFR ~~code of Federal Regulations~~ Section 94.5. (Basis: Reg 1-301)
- ~~*288~~. IES shall develop, maintain and implement a contingency plan for alternative waste disposal to prevent putrescible wastes from remaining on site for longer than 7 days. The contingency plan must address waste disposal in the event of an extended outage. IES shall also include in the ~~a~~ contingency plan measures to minimize ~~excess~~ emissions in the event of a power outage. This plan shall be maintained on-site and be made available for District inspection upon request (Basis: Reg 1-301)
- ~~299~~. The baghouse shall contain ~~woven~~ fabric bags lined with an expanded polytetrafluoroethylene (PTFE) deposited as a thin fibrillated film or other baghouse bags, subject to APCO approval, that are at least equal in performance to ~~woven~~ fabric bags lined with an expanded PTFE deposited as a thin fibrillated film. (Basis: BACT, TBACT)

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~~310.~~ IES shall keep a log of maintenance records for each incinerator, air pollution control equipment and monitoring equipment. Such records shall be maintained on-site for at least five years and be made available for District inspection upon request. (Basis: Reg 1-441, 40 CFR 62, Subpart HHH, 62.14460) ~~Each incinerator shall incinerate no more than 1,000 pounds per hour of waste based on a rolling 12-hour average basis. (Note: This limit is not the only waste feed limit in these conditions. See Conditions 11, 12 and 19.) Until IES extends the exhaust stack height for each incinerator to 58 feet, IES shall operate only one incinerator at a time and incinerate wastes for not more than five days in any week.~~

~~411.~~ Waste feed shall be initiated and continued only in the event that all of the following systems are functioning properly:

- ~~—activated carbon feed system~~ ~~quench tower~~
- ~~—lime feed system~~ ~~process controller~~
- ~~—natural gas feed system~~ ~~baghouse~~
- ~~—city water as cooling water~~ ~~ash removal system~~
- ~~—compressed air system~~

~~Each quench tower shall use city water supplied by the local utility as cooling water. Another source of water shall not be used without prior APCO approval.~~

~~(Basis: Cumulative increase, BACT, TBACT)~~

~~512.~~ Supplemental fuel for each incinerator shall be natural gas as supplied to the facility by the local utility. Fuel oil shall not be used without prior APCO approval. (Basis: Cumulative increase, BACT, TBACT)

~~6. No waste or solid fuel shall be incinerated during refractory curing without prior approval of the Air Pollution Control Officer.~~

~~*713.~~ ~~Waste feed shall not be initiated until the secondary combustion chamber reaches a minimum temperature of 1800 degrees Fahrenheit.~~
No waste shall be fed into the incinerator unless the primary combustion chamber exceeds a temperature of 1400 degrees Fahrenheit as measured by at least one of the following thermocouples, TT1 or TT2 or TT3.
(Basis: TBACTReg 11-13-302)

~~814.~~ Waste feed shall not be initiated until the secondary combustion chamber shall be maintained at reaches a minimum temperature of 1800 degrees as measured by at least

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one of the following thermocouples, TT4 or TT5 or TT6. The secondary combustion chamber temperature shall be maintained at a minimum of 1,800 degrees Fahrenheit as measured by at least one of the following thermocouples, TT4 or TT5 or TT6 based on a 423-hour rolling average, as long as the primary combustion chamber contains combustible materials or ash. and The secondary combustion chamber shall be maintained at a minimum of 1650 degrees Fahrenheit as measured by at least one of the following thermocouples, TT4 or TT5 or TT6, as required by Section 11-13-302, Subsection 302.2 as long as the primary combustion chamber contains combustible materials or ash, during waste combustion. (Basis: Reg 11-13-302, TBACT, 40 CFR 62, Subpart HHH, Table 340 CFR 60, Subpart Ce, 60.37e)

~~9. No waste shall be fed into the incinerator until the condition above is satisfied and the primary chamber temperature exceeds 1400 degrees Fahrenheit as required by Section 11-13-302, Subsection 302.2.~~

~~10. (Deleted. Condition of Authority to Construct. District may calculate risk at any time.)~~

~~*1115. *(a) Risk of contracting cancer during a lifetime of exposure to the emissions from these two incinerators shall not be not greater than 10 in a million, from these two incinerators.~~

*(b) Cancer risk shall be calculated by IES on a consecutive 12-month basis using the following equation:

Cancer risk per million equals number of hours of incineration of waste per incinerator while in compliance with permit condition 20 (a) times 0.00056 plus number of hours of incineration of waste per incinerator while in violation per permit condition 20 (b) through 20 (d) times 0.0196 plus number of hours for each bypass event per incinerator per permit condition 20 (e) times 0.0196.

*(c) The APCO may adjust the above factors to reflect changes in emission rates and adopted health effects values for toxic air contaminants.

~~In the event emissions from these two incinerators comply with all the limits stated in other paragraphs of these conditions, the annual allowed incineration rate of 8,760 tons of waste per year (4,380 tons for each incinerator) shall be changed to limit the risk to 10 in a million.~~

(Basis: Risk Management Policy, TBACT)

~~12. The annual amount of waste incinerated shall not exceed 4,380 tons for each incinerator.~~

~~For the purposes of these conditions, the annual amount of waste incinerated in the two incinerators shall not exceed 8,760 tons total of medical waste plus other allowable wastes unless decreased by condition 11.~~

~~13. (Deleted. Condition of Authority to Construct. District may calculate risk at any time.)~~

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~~14. (Deleted. Condition of Authority to Construct.)~~

16. Opacity and emissions. The emission limits and stack opacity requirements of this part apply at all times except during periods of startup and shutdown. No waste shall be charged to an incinerator during periods of startup or shutdown. (Startup is the time period beginning when the system is activated, and ending when both of the following are satisfied: (1) the temperatures in the primary and secondary combustion chambers meet or exceed the respective minimum temperature requirements (Conditions 13 and 14); and (2) any waste is charged to the incinerator. Shutdown is the time period beginning when all three of the following are satisfied: (1) at least two hours have passed since the most recent waste charge to the incinerator; and (2) all waste has been combusted in the primary chamber; and (3) all ash has been removed from the combustion chamber; and ending when the system is deactivated.)

(a) Opacity shall not exceed the following:

- (1) The owner or operator shall not cause to be discharged into the atmosphere from any incinerator stack any gases that exhibit greater than either a 5 percent opacity hourly average or, for a period or periods aggregating more than three minutes in any hour, an emission equal to or greater than 10% opacity as perceived by an opacity sensing device or a visible emission which is as dark or darker than No. 0.5 on the Ringelmann Chart. (Basis: TBACT)
- (2) Except for emissions from the incinerator stacks, the owner or operator shall not cause to be discharged into the atmosphere from the building housing S-5 and S-6 or from any on-site ash handling or storage, any visible emission. Ash handling and storage shall be enclosed at all times. (Basis: Cumulative Increase, TBACT)

(b) Emissions from each incinerator shall not exceed any limit listed below:

Pollutant	Units (7 percent oxygen, dry basis except as noted)	Limit
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(1) Particulate matter	Milligrams per dry standard cubic meter	30
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(Basis: TBACT)

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(2) Carbon monoxide Parts per million by volume 40

(Basis: 40 CFR 62, Subpart HHH, Table 1)

*(3) Dioxins/furans Nanograms per kilogram of
waste feed TEQ 10

(A) _____ AND

_____ nanograms per dry standard
cubic meter total dioxins/furans 80

_____ OR
_____ nanograms per dry standard
cubic meter TEQ 1.9
_____ (See Note 1 and Note 2 below)

(Basis: TBACT)

(4) Hydrogen chloride Parts per million by volume 100

(Basis: 40 CFR 62, Subpart HHH, Table 1)

A. (5) Sulfur dioxide Parts per million by volume 45

(Basis: BACT)

(6) Nitrogen oxides Parts per million by volume 210

(Basis: BACT)

*(7) Lead Milligrams per dry standard 0.10
cubic meter

(Basis: TBACT)

*(8) Cadmium Milligrams per dry standard 0.05
cubic meter

(Basis: TBACT)

*(9) Mercury Milligrams per dry standard
cubic meter 0.47

_____ OR

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_____ percent reduction _____ 85%
 (Basis: TBACT)

15. Emissions (corrected to 7% oxygen for numerical emission limits excluding opacity, each measured as a 12 hour average except as noted) from each incinerator shall not exceed those listed below. The limits, with the exception of one limit from Section 11-13-301, are from US EPA's proposed NSPS/MACT standards for medical waste incinerators And represent District BACT/TBACT for there Incinerators.

— Pollutant — Emission Limit

— Particulate matter — 30 mg/dscm

— Opacity 5 percent, — 6 minute
 ————— average

— CO — 50 ppm_{dv}

CDD/CDF (Note 1) — 10 ng TEQ per
 ————— kilogram of
 ————— waste feed per
 ————— Section 11-13-601
 ————— and 1.9 ng/dscm TEQ
 ————— (Note 2)
 ————— or 80 ng/dscm total
 ————— CDD/CDF

— HCl — 42 ppm_{dv} or 97%
 ————— reduction, 9 hour
 ————— average

— Sulfur dioxide — 45 ppm_{dv}

— Oxides of Nitrogen as

— Nitrogen Dioxide — 210 ppm_{dv}

— Lead — 0.10 mg/dscm

— Cadmium — 0.05 mg/dscm

— Mercury — 0.47 mg/dscm or 85%
 ————— reduction

— Opacity of fugitive fly ash
 — or bottom ash emissions from
 — any fly ash or bottom ash

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—— storage or handling area
—— within the facility's
—— property boundary —— 0%

Note 1: ~~CDD/CDF are tetra~~ Tetra- through octa-chlorinated dibenzo-p-dioxins and dibenzofurans. These are commonly referred to as CDD/CDF and dioxins/furans and in Regulation 11, Rule 3 as dioxins.

Note 2: TEQ is toxic equivalency. To arrive at the TEQ, measured emissions of each tetra-through octa- CDD and CDF congener are multiplied by the APCO-approved toxic equivalency factor. The products are then added to obtain the total concentration of CDD/CDF emitted in terms of TEQ.

~~1617. Although the District may enforce the limits in condition 15 using District approved source testing and plume evaluation procedures,~~ IES shall perform compliance testing and monitoring using District-approved procedures as follows:

Pollutant Compliance Testing and Monitoring

- (a) Particulate Annual or third year stack test matter(as per Note 1)
- (b) Opacity CEMS, ~~6-minute block~~ 1-hour rolling average (Notes 2 and 3)
- (c) CO CEMS, 12-hour ~~arithmetic~~ rolling average (Notes 3 and 4)
- (d) CDD/CDF Annual or third year stack test (as per Note 1) and at least hourly ~~continuous~~ monitoring of sorbent (carbon) injection rate and continuous monitoring of baghouse inlet temperature.
- (e) HCl Annual or third year stack test (as per Note 1), ~~and continuous~~ once per charge monitoring of charge rate and at least hourly monitoring of sorbent (lime) flow rate
- (f) Sulfur dioxide Annual or third year stack test (as per Note 1)
- (g) Oxides of Nitrogen Annual or third year stack test (as per Note 1)

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- (h) Lead Annual or third year stack test (as per Note 1)
 - (i) Cadmium Annual or third year stack test (as per Note 1)
 - (j) Mercury Annual or third year stack test (as per Note 1) and ~~continuous~~ once per charge monitoring of charge rate and at least hourly monitoring of sorbent (carbon) flow rate
- ~~_____ Opacity of _____ Monthly (as per Note 2, no more~~
~~_____ fugitive fly ash _____ than 30 calendar days following~~
~~_____ or bottom ash _____ the previous performance test)~~
~~_____ emissions from any _____ when ash is removed from the~~
~~_____ fly ash or bottom _____ incinerator and when ash is~~
~~_____ ash storage or _____ removed from the baghouse~~
~~_____ handling area~~
~~_____ within the facility's~~
~~_____ property boundary~~

Note 1: Compliance with the PM, CDD/CDF, HCl, SO₂, NO_x, Pb, Cd, and Hg emission limits shall be determined by conducting an annual performance test (no more than 12 months following the previous performance test). If all three performance tests over a 3-year period indicate compliance with the emission limit for a ~~pollutant~~ (PM, CDD/CDF, HCl, SO₂, NO_x, Pb, Cd, and Hg), IES may forgo a performance test for that pollutant for the subsequent 2 years. At a minimum, a performance test for PM, CDD/CDF, HCl, SO₂, NO_x, Pb, Cd, and Hg shall be conducted every third year (no more than 36 months following the previous compliance test). If a performance test conducted every third year indicates compliance with the emission limit for a ~~pollutant~~ (PM, CDD/CDF, HCl, SO₂, NO_x, Pb, Cd, and Hg), IES may forgo a performance test for that pollutant for an additional 2 years. IES has had three acceptable tests for 1996, 1997, and 1998. The next test is required by 2001. -If any performance test indicates noncompliance with the respective emission limit, a performance test for that pollutant shall be conducted within 30 days of District receipt of test results and annually until all annual performance tests over a 3-year period indicate compliance with the emission limit.

Note 2: Opacity CEMs shall be maintained in accordance with manufacturer's recommendations and applicable procedures under appendices B and F of 40 CFR Part 60.

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Note 3: CEM Downtime due to maintenance or repair, including when a monitor is reported inoperative, shall not exceed 360 hours per monitor per calendar year. measurements shall be conducted according to EPA Method 9 for visible emissions. Opacity shall be measured at a point where the emissions are outside of the building housing the incinerators.

Note 4: The permit holder shall also operate a CEM to measure the oxygen concentration in each incinerator stack. The CEM to measure oxygen concentration shall be operated in accordance with the applicable procedures under appendices B and F of 40 CFR part 60.

(Basis: Reg 1-420 and 600, Reg 11-13-501, AB 2588, 40 CFR 62, Subpart HHH, 62.14451 through 62.14453)

Note 5: After 40 CFR 62, Subpart HHH has been adopted by EPA, the EPA methods in Subpart HHH shall be used to determine compliance.

*18. In addition to the source testing required above, whenever IES conducts a performance test for CDD/CDF, IES shall conduct a performance test for the following using APCO-approved source test procedures:

*(a) Metals:

- (1) Arsenic
- (2) Beryllium
- (3) Cadmium
- (4) Chromium including total chromium and hexavalent chromium
- (5) Copper
- (6) Lead
- (7) Manganese
- (8) Mercury
- (10) Nickel
- (11) Selenium
- (12) Zinc

*(b) Organics:

- (1) Benzene
- (2) Formaldehyde
- (3) Polyaromatic hydrocarbons (PAHs)
- (4) Polychlorinated diphenyls (PCBs)

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(5) Vinyl chloride

(Basis: Risk Management Policy, AB 2588)

~~17. IES shall maintain thorough records documenting the results of the initial and annual performance test, records demonstrating continuous monitoring of site specific operating parameters, and CEMS output data and quality assurance determinations. These records shall be kept available for at least 5 years.~~

~~18~~19. Sampling ports, platforms, access to the ports and platforms, and electrical outlets for sampling shall meet the minimum requirements of the District Source Test Section prior to the issuance of a Permit to Operate. Temperature sensing devices (i.e., thermocouples) required by these permit conditions shall be installed at locations approved by the District Source Test Section. IES shall notify the APCO, Attention: Director of Compliance and Enforcement Division District Source Test Section at least two weeks30 days prior to any source test. (Basis: Reg 1-600)

~~19~~20. (a) When IES initially demonstrated compliance with the Hg, CDD/CDF and HCl emission limits expressed in condition 15, IES established the following operating conditions. The following operating conditions shall be maintained as long as either incinerator contains combustible materials or ash:

- (1) Minimum Hg and CDD/CDF sorbent flow rate (activated carbon): 3.0 lb/hr
- (2) Minimum HCl sorbent flow rate (hydrated lime): 33.0 lb/hr
- (3) Maximum hourly charge rate: 950 lb/hr
- (4) Minimum secondary chamber temperature: 1,800 degrees Fahrenheit
- (5) Maximum baghouse inlet temperature: 455 degrees Fahrenheit

(b) Operation above the maximum baghouse inlet temperature, and/or above the maximum charge rate, and/or below the minimum dioxin/furan sorbent flow rate (each measured on a 3-hour rolling average) shall constitute a violation of the dioxin/furan emission limit.

(c) Operation above the maximum charge rate and/or below the minimum HCl sorbent flow rate (each measured on a 3-hour rolling average) shall constitute a violation of the HCl emission limit.

(d) Operation above the maximum charge rate and/or below the minimum Hg sorbent flow rate (each measured on a 3-hour rolling average) shall constitute a violation of the Hg emission limit.

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- (e) Use of the bypass stack (except during startup, shutdown, or malfunctions for which the APCO grants breakdown relief) shall constitute a violation of the PM, dioxin/furan, HCl, Pb, Cd and Hg emission limits. The number of hours for each bypass event shall be the number of hours (rounded up to a whole number) that any portion of the abatement system is bypassed. A bypass event begins when any portion of the abatement system is bypassed, and ends when either:
- (1) the incinerator exhaust is routed through the abatement system, or
 - (2) all combustible material and ash have been removed from the incinerator combustion chamber.

~~Operation of either incinerator below either
minimum sorbent flow rate, or above the maximum
charge weight, or above the maximum hourly charge
rate, or above the maximum baghouse inlet
temperature shall constitute a violation of these
permit conditions since that type of operation may
result in excessive emissions of Hg, CDD/CDF or HCl.
Compliance shall be calculated on a 123-hour blockrolling
average. This condition may be modified by the
District to reflect the results of additional testing.~~

~~(Basis: Reg 1-441, Reg 2-6-501, TBACT, 40 CFR 62, Subpart HHH, 60.14455)~~

~~20. (Deleted. Condition of Authority to Construct.
Results incorporated in Condition 19.)~~

~~21. (Deleted. Condition of Authority to Construct.
Results incorporated in Condition 19.) 22. (Deleted. Condition of Authority to
Construct.)~~

21. Monitoring, reporting and record keeping requirements.

- (a) The owner or operator shall install, calibrate (to manufacturers' specifications), maintain, and operate devices (or establish methods) for monitoring the applicable maximum and minimum operating parameters listed in Conditions 13, 14 and 20 such that these devices (or methods) measure and record values for these operating parameters at the frequencies indicated below at all times except during periods of startup and shutdown. operating parameters to be monitored minimum frequency

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<u>Data measurement</u>	<u>Data recording</u>
<u>Maximum operating parameters:</u>	
<u>Charge rate</u>	<u>Once per charge</u>
<u>Baghouse inlet temperature</u>	<u>Continuous Once per minute</u>

<u>Minimum operating parameters:</u>	
<u>Primary chamber temperature</u>	<u>Continuous Once per minute</u>
<u>Secondary chamber temperature</u>	<u>Continuous Once per minute</u>
<u>Dioxin/furan sorbent flow rate</u>	<u>Hourly Once per hour</u>
<u>HCl sorbent flow rate</u>	<u>Hourly Once per hour</u>
<u>Mercury (Hg) sorbent flow rate</u>	<u>Hourly Once per hour</u>

- (b) Within 3 months of issuance of the Major Facility Review permit, the owner or operator shall install, calibrate (to manufacturers' specifications), maintain, and operate a device or method for measuring the use of the bypass stack including date, time, and duration of such use.
- (c) The owner or operator shall obtain monitoring data at all times during incinerator operation except during periods of monitoring equipment malfunction, calibration, or repair. At a minimum, valid monitoring data shall be obtained for 75 percent of the operating hours per day and for 90 percent of the operating days per calendar quarter that each incinerator is combusting waste.
- (d) The owner or operator shall maintain the following information for a period of at least 5 years:
- (1) Calendar date of each record;
 - (2) Records of the following data:
 - (i) Concentrations of carbon monoxide and oxygen and measurements of opacity as determined by the continuous emission monitoring system
 - (ii) Waste charge dates, times, weights, type of waste (medical, ship, etc.), hourly charge rates, and rolling 3-hour averages;
 - (iii) Baghouse inlet temperatures during each minute of operation and rolling 3-hour averages;
 - (iv) Amount and type of dioxin/furan sorbent used during each hour of operation and rolling 3-hour averages;
 - (v) Amount and type of Hg sorbent used during each hour of operation;
 - (vi) Amount and type of HCl sorbent used during each hour of

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- operation and rolling 3-hour averages;
- (vii) Secondary chamber temperatures recorded during each minute of operation;
- (viii) Primary chamber temperatures recorded during each minute of operation;
- (ix) Records indicating use of the bypass stack, including dates, times, and duration's, and total hours of bypass on a rolling 12-month basis, and;
- (x) 12-month rolling risk calculations performed in accordance with part 15(b), and;
- (3) Identification of calendar days for which data on emission rates or operating parameters specified under paragraph (d)(2) have not been obtained, with an identification of the emission rates or operating parameters not measured, reasons for not obtaining the data, and a description of corrective actions taken.
- (4) Identification of calendar days, times and durations of malfunctions, a description of the malfunction and the corrective action taken.
- (5) Identification of calendar days for which data on emission rates or operating parameters specified under paragraph (d)(2) of this Condition exceeded the applicable limits, with a description of the exceedances, reasons for such exceedances, and a description of corrective actions taken.
- (6) The results of the initial, annual, and any subsequent performance tests conducted to determine compliance with the emission limits and/or to establish operating parameters, as applicable.
- (7) Records showing the names of incinerator operators who have completed review of the information in 40 CFR Paragraph 62.14424 of Subpart HHH , including the date of the initial review and all subsequent annual reviews;
- (8) Records showing the names of the incinerator operators who have completed the operator training requirements, including documentation of training and the dates of the training;
- (9) Records showing the names of the incinerator operators who have met the criteria for qualification under 40 CFR Paragraph 62.14423 of Subpart HHH and the dates of their qualification;
- (10) Records to document compliance with the operator training and qualification requirements of Section 11-13-404; and
- (11) Records of calibration of any monitoring devices as required under (a) and

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- (b) of this Condition.
- (12) All records specified under paragraph (d) of this section shall be maintained onsite in either paper copy or readily available computer-readable format, unless an alternative format is approved by the Air Pollution Control Officer.
- (e) The owner or operator shall submit semiannual reports containing any information recorded under paragraphs (e)(1) through (e)(8) of this section no later than 60 days following the reporting period. The reporting periods are January through June and July through December. All reports shall be signed by the facilities manager and the responsible official.
- (1) The values for the site-specific operating parameters listed in Condition 20.
- (2) The highest maximum operating parameter and the lowest minimum operating parameter, as applicable, for each operating parameter recorded for the calendar year being reported, pursuant to Condition 20.
- (3) The highest maximum operating parameter and the lowest minimum operating parameter, as applicable for each operating parameter recorded pursuant to Condition 20 for the calendar year preceding the year being reported, in order to provide the Air Pollution control Officer with a summary of the performance of the facility over a 2-year period.
- (4) Any information recorded under paragraphs (d)(3) through (d)(5) of this Condition for the calendar year being reported.
- (5) Any information recorded under paragraphs (d)(3) through (d)(5) of this section for the calendar year preceding the year being reported, in order to provide a summary of the performance of each incinerator over a 2-year period.
- (6) If a performance test was conducted during the reporting period, the results of that test.
- (7) If no exceedances or malfunctions were reported under paragraphs (d)(3) through (d)(5) of this Condition for the calendar year being reported, a statement that no exceedances occurred during the reporting period.
- (8) Any use of the bypass stack, the duration, reason for malfunction, and corrective action taken.
- (9) All reports shall be submitted to the APCO, Attention: Director of Compliance and Enforcement Division.

(Basis: 40 CFR 62, Subpart HHH, 62.14460 through 62.14465, Regulation 11-13-404)

23. IES shall submit to the APCO, Attention: Source

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- ~~Test Section, the results of the initial performance test and all subsequent performance tests. Also, reports on emission rates or operating parameters that have not been obtained (i.e., incinerator primary chamber temperature, secondary chamber temperature, baghouse inlet temperature, activated carbon flow rate, hydrated lime flow rate, charge weight, hourly charge rate, opacity, CO, etc.) or that exceed applicable limits must be submitted to the APCO, Attention: Source Test Section, within thirty days after the end of the quarter of occurrence. If no exceedances occur during a quarter, IES shall submit a letter to the APCO, Attention: Source Test Section, stating so. All reports submitted to comply with the requirements of these permit conditions must be signed by the facilities manager.~~
- ~~24. Temperature measurement devices shall be calibrated in accordance with the ASME Power Performance Test Code or other APCO approved procedure.~~
- ~~25. No visible fugitive gaseous emissions shall be allowed to escape from the incinerator on a regular or predictable schedule.~~
- ~~26. IES shall keep a log of maintenance records for each incinerator, air pollution control equipment and monitoring equipment. Such records shall be maintained on site and be made available for District inspection upon request.~~
- ~~31. Records to document compliance with the operator training and qualification requirements of Section 11-13-404 shall be kept on file for the life of the affected facility.~~
- ~~32. IES shall maintain a continuous data recording system which provides for each day of operation~~

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- ~~continuous recording of the following for each~~
- ~~incinerator system:~~
- ~~a. Primary and secondary combustion chamber temperatures~~
- ~~b. Carbon monoxide concentration in exhaust gases~~
- ~~c. Fabric filter inlet temperature and pressure drop~~
- ~~d. Opacity of stack emissions~~
- ~~e. Oxygen concentration in exhaust gases~~
- ~~33. IES shall implement procedures for monitoring and~~
- ~~recording the following parameters for each~~
- ~~incinerator system:~~
- ~~a. Weight and time of each waste charge~~
- ~~b. Total feed of activated carbon per 4 hour period~~
- ~~c. Total feed of lime per 4 hour period~~
- ~~34. IES shall calculate the following for each~~
- ~~incinerator system and compare with the applicable~~
- ~~standards contained in these conditions:~~
- ~~a. Secondary combustion chamber temperature,~~
- ~~12 hour average~~
- ~~b. Carbon monoxide, one hour and 12 hour averages~~
- ~~in ppmv at 7% oxygen~~
- ~~c. Fabric filter inlet temperature, 12 hour average~~
- ~~d. Waste charge weight and waste hourly charge~~
- ~~weight, each as a 12 hour average, and annual~~
- ~~waste charge weight~~
- ~~e. Stack opacity, 6 minute average~~
- ~~f. Fabric filter pressure drop, 12 hour average~~
- ~~36. IES shall source test to quantify the emissions of~~
- ~~hexavalent chromium whenever a compliance test for~~
- ~~CDD/CDF is conducted. The source test for~~
- ~~hexavalent chromium shall use a test protocol~~
- ~~approved by the District.~~

VII. APPLICABLE LIMITS & COMPLIANCE MONITORING REQUIREMENTS

This section has been included only to summarize the applicable emission limits contained in Section IV, Source-Specific Applicable Requirements, of this permit. The following tables show the relationship between each emission limit and the associated compliance monitoring provisions, if any. The monitoring frequency indicates whether periodic (P) or continuous (C) monitoring is required. For periodic monitoring, the frequency of the monitoring has also been shown, either annual (A), quarterly (Q), monthly (M), daily (D), hourly (H) or on an event basis (E). No monitoring (N) has been required if the current applicable rule or regulation does not require monitoring, and the operation is unlikely to deviate from the applicable emission limit based upon the nature of the operation.

Table VII - A
Applicable Limits and Compliance Monitoring Requirements
S5 AND S6 - Medical Waste Incinerators

Type of Limit	Emission Limit Citation	FE Y/N	Future Effective Date	Emission Limit	Monitoring Requirement Citation	Monitoring Frequency (P/C/N)	Monitoring Type
TSP	BAAQMD 6-301	Y		more than Ringelmann 1.0 for no more than 3 min in any hour	BAAQMD Condition # 13534, Part 17 (b)	C	COM
	BAAQMD 6-302	Y		more than 20% opacity for no more than 3 min in any hour	BAAQMD Condition # 13534, Part 17 (b)	C	COM
	BAAQMD 6-310.1	Y		0.15 gr/dscf @ 12% CO ₂	BAAQMD Condition # 13534, Part 17 (a)	P/Every 3 years	Source Test
	BAAQMD 6-311	Y		4.10P ^{0.67} lb/hr, where P is process weight, ton/hr	BAAQMD Condition # 13534, Part 17 (a)	P/Every 3 years	Source Test
TSP	BAAQMD Condition # 13534, Part 16 (b) (1)	N		30 milligrams per dscm @ 7% O ₂ , dry basis	BAAQMD Condition # 13534, Part 17 (a)	P/Every 3 years	Source Test

VII Applicable Limits and Compliance Monitoring Requirements

Table VII - A
Applicable Limits and Compliance Monitoring Requirements
S5 AND S6 - Medical Waste Incinerators

Type of Limit	Emission Limit Citation	FE Y/N	Future Effective Date	Emission Limit	Monitoring Requirement Citation	Monitoring Frequency (P/C/N)	Monitoring Type
TSP	BAAQMD Condition # 13534, Part 16 (a)(1)	N		5 percent opacity, one-hour average	BAAQMD Condition # 13534, Part 17 (b); Regulation 11-13-501.5	C	COM
	BAAQMD Condition # 13534, Part 16 (a)(1)	Y		> 10 percent opacity for not more than 3 minutes in any hour	BAAQMD Condition # 13534, Part 17 (b); Regulation 11-13-501.5	C	COM
	BAAQMD Condition # 13534, Part 16 (a)(1)	N		0.5 Ringelmann for not more than 3 minutes in any hour	BAAQMD Condition # 13534, Part 17 (b)	C	COM
	BAAQMD Condition # 13534, Part 16 (a)(2); Regulation 11-13-302.4	N		No visible fugitive ash emissions	None	N	
PM	40 CFR 62 Subpart HHH, Table 1	Y		34 milligrams per dscm @ 7% O ₂ , dry basis	BAAQMD Condition # 13534, Part 17 (a)	P/Every 3 years	Source Test

VII Applicable Limits and Compliance Monitoring Requirements

Table VII - A
Applicable Limits and Compliance Monitoring Requirements
S5 AND S6 - Medical Waste Incinerators

Type of Limit	Emission Limit Citation	FE Y/N	Future Effective Date	Emission Limit	Monitoring Requirement Citation	Monitoring Frequency (P/C/N)	Monitoring Type
PM	40 CFR 62.14412	Y		< 10 percent opacity, 6-minute block average	Monitoring subsumed by monitoring for BAAQMD Condition # 13534, Part 16 (a)(1)	N	
Carbon Monoxide	BAAQMD Condition # 13534, Part 16 (b) (2);	Y		40 ppm _{dv} @ 7% O ₂ , dry basis	Regulation 11-13-501.2; BAAQMD Condition #13534, Part 17 (c)	C	CEM
	40 CFR 62 Subpart HHH, Table 1	Y		40 ppm _{dv} @ 7% O ₂ , dry basis	40 CFR 62.14451	P/Every 3 years	Source test
Dioxin/Furans	Regulation 11-13-301	N		10 nanograms per kilogram of waste burned	Regulation 11-13-403; BAAQMD Condition #13534, Part 17 (d)	P/Every 3 years	Source Test
Dioxins/Furans	BAAQMD Condition # 13534, Part 16 (b) (3)	N		80 nanograms per dscm total or 1.9 nanograms per dscm TEQ, both at 7% O ₂ , dry basis	BAAQMD Condition #13534, Part 17 (d)	P/Every 3 years	Source Test

VII Applicable Limits and Compliance Monitoring Requirements

Table VII - A
Applicable Limits and Compliance Monitoring Requirements
S5 AND S6 - Medical Waste Incinerators

Type of Limit	Emission Limit Citation	FE Y/N	Future Effective Date	Emission Limit	Monitoring Requirement Citation	Monitoring Frequency (P/C/N)	Monitoring Type
Dioxins/ Furans	BAAQMD Condition # 13534, Part 16 (b) (3)	N		10 nanograms per kilogram of waste feed TEQ	BAAQMD Condition #13534, Part 17 (d)	P/Every 3 years	Source Test
	40 CFR 62 Subpart HHH, Table 1	Y		125 nanograms per dscm total or 2.3 nanograms per dscm TEQ, both at 7% O ₂ , dry basis	40 CFR 62.14451	N	Initial source test
Hydrogen Chloride	BAAQMD Condition # 13534, Part 16 (b) (4); 40 CFR 62 Subpart HHH, Table 1	Y		100 ppm _{dv} at 7% O ₂ , dry basis	BAAQMD Condition #13534, Part 17 (e)	P/Every 3 years	Source Test
Sulfur dioxide	BAAQMD 9-1-302	Y		Sulfur dioxide emission not to exceed 300 ppm (dry)	BAAQMD Condition #13534, Part 17 (f)	P/Every 3 years	Source Test
	BAAQMD Condition # 13534, Part 16 (b) (5);	N		45 ppm _{dv} at 7% O ₂ , dry basis	BAAQMD Condition #13534, Part 17 (f)	P/Every 3 years	Source Test

VII Applicable Limits and Compliance Monitoring Requirements

Table VII - A
Applicable Limits and Compliance Monitoring Requirements
S5 AND S6 - Medical Waste Incinerators

Type of Limit	Emission Limit Citation	FE Y/N	Future Effective Date	Emission Limit	Monitoring Requirement Citation	Monitoring Frequency (P/C/N)	Monitoring Type
	40 CFR 62 Subpart HHH, Table 1	Y		55 ppm _{dv} at 7% O ₂ , dry basis	BAAQMD Condition #13534, Part 17 (f)	P/Every 3 years	Source Test
Nitrogen oxides	BAAQMD Condition # 13534, Part 16 (b) (6);	Y		210 ppm _{dv} at 7% O ₂ , dry basis	BAAQMD Condition #13534, Part 17 (g)	P/Every 3 years	Source Test
	40 CFR 62 Subpart HHH, Table 1	Y		250 ppm _{dv} at 7% O ₂ , dry basis	BAAQMD Condition #13534, Part 17 (g)	P/Every 3 years	Source Test
Lead	BAAQMD 11-1-301	Y		15 lb/day	BAAQMD Condition #13534, Part 17 (h)	P/Every 3 years	Source Test
	BAAQMD 11-1-302	Y		GLC not to exceed 1.0 ug/cu. m., 24 hr. avg.		N	
	BAAQMD Condition # 13534, Part 16 (b) (7)	Y		0.10 milligrams per dscm @ 7% O ₂ , dry basis	BAAQMD Condition #13534, Part 17 (h)	P/Every 3 years	Source Test
	40 CFR 62 Subpart HHH, Table 1	Y		1.2 milligrams at 7% O ₂ , dry basis	BAAQMD Condition #13534, Part 17 (h)	P/Every 3 years	Source Test

VII Applicable Limits and Compliance Monitoring Requirements

Table VII - A
Applicable Limits and Compliance Monitoring Requirements
S5 AND S6 - Medical Waste Incinerators

Type of Limit	Emission Limit Citation	FE Y/N	Future Effective Date	Emission Limit	Monitoring Requirement Citation	Monitoring Frequency (P/C/N)	Monitoring Type
Cadmium	BAAQMD Condition # 13534, Part 16 (b) (8); 40 CFR 62 Subpart HHH	Y		0.05 milligrams per dscm @ 7% O ₂ , dry basis	BAAQMD Condition #13534, Part 17 (i)	P/Every 3 years	Source Test
	40 CFR 62 Subpart HHH, Table 1	Y		0.16 milligrams per dscm @ 7% O ₂ , dry basis	BAAQMD Condition #13534, Part 17 (i)	P/Every 3 years	Source Test
Mercury	BAAQMD Condition # 13534, Part 16 (b) (9);	Y		0.47 milligrams per dscm @ 7% O ₂ , dry basis or 85% reduction	BAAQMD Condition #13534, Part 17 (j)	P/Every 3 years	Source Test
	40 CFR 62 Subpart HHH, Table 1	Y		0.55 milligrams per dscm @ 7% O ₂ , dry basis or 85% reduction	BAAQMD Condition #13534, Part 17 (j)	P/Every 3 years	Source Test
Cancer risk	BAAQMD Condition # 13534, Part 15(a)	N		Cancer risk not to exceed 10 in a million	BAAQMD Condition # 13534, Part 15(b)	P/M	Calculation
Primary chamber temp	BAAQMD Condition # 13534, Part 13	N		No waste feed unless primary temperature exceeds 1400 degrees Fahrenheit	BAAQMD Condition # 13534, Parts 13 and 21	C	Temperature monitoring

VII Applicable Limits and Compliance Monitoring Requirements

Table VII - A
Applicable Limits and Compliance Monitoring Requirements
S5 AND S6 - Medical Waste Incinerators

Type of Limit	Emission Limit Citation	FE Y/N	Future Effective Date	Emission Limit	Monitoring Requirement Citation	Monitoring Frequency (P/C/N)	Monitoring Type
Secondary chamber temp	BAAQMD Condition # 13534, Part 14	Y		No waste feed unless secondary temperature exceeds 1800 degrees Fahrenheit	BAAQMD Condition # 13534, Parts 14 and 21	C	Temperature monitoring
Secondary chamber temp	BAAQMD Condition # 13534, Part 14 and Part 20 (a) (4)	Y		Continue waste feed only if secondary temperature 3-hour average exceeds 1800 degrees Fahrenheit	BAAQMD Condition # 13534, Parts 14 and 21	C	Temperature monitoring,
Activated carbon feed rate	BAAQMD Condition # 13534, Part 20(a)(1)			3.0 lb/hr minimum on a 3-hr rolling average	BAAQMD Condition # 13534, Part 21(a)	P/Hourly	Check feeder for proper operation
Lime feed rate	BAAQMD Condition # 13534, Part 20(a)(2)			33.0 lb/hr minimum on a 3-hr rolling average	BAAQMD Condition # 13534, Part 21(a)	P/Hourly	Check feeder for proper operation
Waste feed rate	BAAQMD Condition # 13534, Part 20(a)(3)	Y		950 lb/hr maximum on a 3-hr rolling average	BAAQMD Condition # 13534, Part 21(a)	P/E	CEM
Baghouse Inlet Temp	BAAQMD Condition # 13534, Part 20(a)(5)	Y		455 degrees Fahrenheit maximum on a 3-hr rolling average	BAAQMD Condition # 13534, Part 21(a)	C	Temperature monitor

VII Applicable Limits and Compliance Monitoring Requirements

Table VII - A
Applicable Limits and Compliance Monitoring Requirements
S5 AND S6 - Medical Waste Incinerators

Type of Limit	Emission Limit Citation	FE Y/N	Future Effective Date	Emission Limit	Monitoring Requirement Citation	Monitoring Frequency (P/C/N)	Monitoring Type
Bypass usage	BAAQMD Condition # 13534, Part 20(e)	Y		No use of bypass during waste incineration	BAAQMD Condition # 13534, Part 21(b)	C	bypass monitor (within 3 months of permit issuance)
Oxygen content	None	Y		None	BAAQMD Condition # 13534, Part 17, Note 4	C	CEM

VIII. TEST METHODS

The test methods associated with the emission limit of a District regulation are generally found in Section 600 of the regulation. The following table indicates only the test methods associated with the emission limits referenced in Section VII, Applicable Emission Limits & Compliance Monitoring Requirements, of this permit.

Table VIII
Test Methods

Applicable Requirement	Description of Requirement	Acceptable Test Methods
BAAQMD 6-301	Ringelmann No. 1 Limitation	Manual of Procedures, Volume I, Evaluation of Visible Emissions
BAAQMD 6-310	Particulate Weight Limitation	Manual of Procedures, Volume IV, ST-15, Particulate Sampling
BAAQMD 6-311	General Operations	Manual of Procedures, Volume IV, ST-15, Particulate Sampling
BAAQMD 9-1-302	General Emission Limitation	Manual of Procedures, Volume IV, ST-19A, Sulfur Dioxide, Continuous Sampling, or ST-19B, Total Sulfur Oxides Integrated Sample
BAAQMD 11-13-601	Determination of Dioxin emissions	ARB Test Method 428, Polychlorinated Dibenzo-p-Dioxin (PCDD), Polychlorinated Dibenzofuran (PCDF), and Polychlorinated Biphenyl (PCB) Emissions from Stationary Sources
BAAQMD 11-13-602	Determination of Residence Time	Manual of Procedures, Volume IV, ST-17, Stack Gas Velocity and Volumetric Flowrate
BAAQMD Condition #13534, Part 16 (a) (1)	Opacity limit with CEM	Manual of Procedures, Volume V, Continuous Emission Monitoring Policy and Procedures
BAAQMD Condition #13534, Part 16 (a) (1) and (2)	Opacity limit with visible reading	Manual of Procedures, Volume I, Evaluation of Visible Emissions

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Table VIII
Test Methods

Applicable Requirement	Description of Requirement	Acceptable Test Methods
BAAQMD Condition #13534, Part 16 (b) (1)	PM Emission Limit	Manual of Procedures, Volume IV, ST-15, Particulate Sampling

VIII. Test Methods

Table VIII
Test Methods

Applicable Requirement	Description of Requirement	Acceptable Test Methods
BAAQMD Condition #13534, Part 16 (b) (2)	CO Concentration Limit	Manual of Procedures, Volume IV, ST-6, Carbon Monoxide, Continuous Sampling and ST-14, Oxygen, Continuous Sampling BAAQMD Manual of Procedures, Volume IV, ST-6
BAAQMD Condition #13534, Part 16 (b) (3)	Dioxin Emission and Concentration Limit	ARB Test Method 428, Polychlorinated Dibenzo-p-Dioxin (PCDD), Polychlorinated Dibenzofuran (PCDF), and Polychlorinated Biphenyl (PCB) Emissions from Stationary Sources
BAAQMD Condition #13534, Part 16 (b) (4)	HCl Concentration Limit	EPA Test Method 0050, Chloride, Hydrogen Chloride Isokinetic Sampling
BAAQMD Condition #13534, Part 16 (b) (5)	SO ₂ Concentration Limit	Manual of Procedures, Volume IV, ST-19A, Sulfur Dioxide, Continuous Sampling, or ST-19B, Total Sulfur Oxides Integrated Sample
BAAQMD Condition #13534, Part 16 (b) (6)	NO _x Concentration Limit	Manual of Procedures, Volume IV, ST-13A, Oxides of Nitrogen, Continuous Sampling and ST-14, Oxygen, Continuous Sampling
BAAQMD Condition #13534, Part 16 (b) (7)	Lead Concentration Limit	BAAQMD Manual of Procedures, Volume IV, ST-9, Lead
BAAQMD Condition #13534, Part 16 (b) (7)	Cadmium Concentration Limit	EPA Test Method 29, Determination of Metals Emissions from Stationary Sources
BAAQMD Condition #13534, Part 16 (b) (7)	Mercury Concentration Limit	BAAQMD Manual of Procedures, Volume IV, ST-10, Mercury
BAAQMD Condition #13534, Part 18 (a) (1)	Emissions of arsenic	EPA Test Method 29, Determination of Metals Emissions from Stationary Sources
BAAQMD Condition #13534, Part 18 (a) (1)	Emissions of beryllium	EPA Test Method 29, Determination of Metals Emissions from Stationary Sources

VIII. Test Methods

Table VIII
Test Methods

Applicable Requirement	Description of Requirement	Acceptable Test Methods
BAAQMD Condition #13534, Part 18 (a) (1)	Emissions of cadmium	EPA Test Method 29, Determination of Metals Emissions from Stationary Sources
BAAQMD Condition #13534, Part 18 (a) (1)	Emissions of chromium including total chromium and hexavalent chromium	EPA Test Method 29, , Determination of Metals Emissions from Stationary Sources, plus CARB Method 425
BAAQMD Condition #13534, Part 18 (a) (1)	Emissions of copper	EPA Test Method 29, Determination of Metals Emissions from Stationary Sources
BAAQMD Condition #13534, Part 18 (a) (1)	Emissions of lead	EPA Test Method 29, Determination of Metals Emissions from Stationary Sources
BAAQMD Condition #13534, Part 18 (a) (1)	Emissions of manganese	EPA Test Method 29, Determination of Metals Emissions from Stationary Sources
BAAQMD Condition #13534, Part 18 (a) (1)	Emissions of mercury	EPA Test Method 29, Determination of Metals Emissions from Stationary Sources
BAAQMD Condition #13534, Part 18 (a) (1)	Emissions of nickel	EPA Test Method 29, Determination of Metals Emissions from Stationary Sources
BAAQMD Condition #13534, Part 18 (a) (1)	Emissions of selenium	EPA Test Method 29, Determination of Metals Emissions from Stationary Sources
BAAQMD Condition #13534, Part 18 (a) (1)	Emissions of zinc	EPA Test Method 29, Determination of Metals Emissions from Stationary Sources

VIII. Test Methods

Table VIII
Test Methods

Applicable Requirement	Description of Requirement	Acceptable Test Methods
BAAQMD Condition #13534, Part 18 (b) (1)	Emissions of benzene	EPA Test Method TO-14, Organic Compounds, Semi-Volatile and Volatile
BAAQMD Condition #13534, Part 18 (b) (1)	Emissions of formaldehyde	EPA Test Method 0011, Aldehyde, Formaldehyde & Ketone from Stationary Sources
BAAQMD Condition #13534, Part 18 (b) (1)	Emissions of PAHs	CARB Method 429, Polycyclic Aromatic Hydrocarbon (PAH) Emissions
BAAQMD Condition #13534, Part 18 (b) (1)	Emissions of PCBs	EPA Test Method 23, Determination of Poly-chlorinated Dibenzo-P-Dioxins and Poly-chlorinated Dibenzofurans from Stationary Sources
BAAQMD Condition #13534, Part 18 (b) (1)	Emissions of vinyl chloride	EPA Test Method TO-14, Organic Compounds, Semi-Volatile and Volatile

IX. PERMIT SHIELD

A. *Subsumed Requirements*

Pursuant to District Regulations 2-6-233 and 2-6-409.12, as of the date this permit is issued, the federally enforceable “subsumed” requirements cited in the following table are not applicable to the source or group of sources identified at the top of the table. The District has determined that compliance with the “streamlined” requirements listed below and elsewhere in this permit will assure compliance with the substantive requirements of the “subsumed” regulations and/or standards. Enforcement actions and litigation may not be initiated against the source or group of sources covered by this shield based on the “subsumed” regulatory and/or statutory provisions cited.

Table IX B - 1
Permit Shield for Subsumed Requirements
S5 AND S6 - Medical Waste Incinerators

Subsumed Requirement Citation	Title or Description	Streamlined Requirements	Title or Description
40 CFR 62.14451 (b)(1)	Annual opacity limit performance test to assure compliance with following limit: < 10% opacity, 6-min block average	BAAQMD Condition # 13534, Part 17 (b)	Opacity meter recorder programmed to assure compliance with following limit: 10 percent opacity for not more than 3 minutes in any hour

X. GLOSSARY

BAAQMD

Bay Area Air Quality Management District

BACT

Best Available Control Technology

CAA

The federal Clean Air Act

CAAQS

California Ambient Air Quality Standards

CEM

Continuous Emission Monitor

CEQA

California Environmental Quality Act

CFR

The Code of Federal Regulations. 40 CFR contains the implementing regulations for federal environmental statutes such as the Clean Air Act. Parts 50-99 of 40 CFR contain the requirements for air pollution programs.

CO

Carbon Monoxide

COM

Continuous Opacity Monitor

Cumulative Increase

The sum of permitted emissions from each new or modified source since a specified date pursuant to BAAQMD Rule 2-1-403, Permit Conditions (as amended by the District Board on 7/17/91) and SIP Rule 2-1-403, Permit Conditions (as approved by EPA on 6/23/95). Used to determine whether threshold-based requirements are triggered.

District

The Bay Area Air Quality Management District

EPA

The federal Environmental Protection Agency.

X. Glossary

Excluded

Not subject to any District Regulations.

Federally Enforceable, FE

All limitations and conditions which are enforceable by the Administrator of the EPA including those requirements developed pursuant to 40 CFR Part 51, subpart I (NSR), Part 52.21 (PSD), Part 60, (NPS), Part 61, (NESHAPs), Part 63 (HAP), and Part 72 (Permits Regulation, Acid Rain), and also including limitations and conditions contained in operating permits issued under an EPA-approved program that has been incorporated into the SIP.

HAP

Hazardous Air Pollutant. Any pollutant listed pursuant to Section 112(b) of the Act. Also refers to the program mandated by Title I, Section 112, of the Act and implemented by both 40 CFR Part 63, and District Regulation 2, Rule 5.

Major Facility

A facility with potential emissions of regulated air pollutants greater than or equal to 100 tons per year, greater than or equal to 10 tons per year of any single hazardous air pollutant, and/or greater than or equal to 25 tons per year of any combination of hazardous air pollutants, or such lesser quantity as determined by the EPA administrator.

MFR

Major Facility Review. The District's term for the federal operating permit program mandated by Title V of the Act and implemented by District Regulation 2, Rule 6.

MOP

The District's Manual of Procedures.

NAAQS

National Ambient Air Quality Standards

NESHAPs

National Emission Standards for Hazardous Air Pollutants. Contained in 40 CFR Part 61.

NMHC

Non-methane Hydrocarbons

NO_x

Oxides of nitrogen.

X. Glossary

NSPS

Standards of Performance for New Stationary Sources. Federal standards for emissions from new stationary sources. Mandated by Title I, Section 111 of the Act, and implemented by both 40 CFR Part 60 and District Regulation 10.

NSR

New Source Review. A federal program for pre-construction review and permitting of new and modified sources of air pollutants for which the District is classified "non-attainment". Mandated by Title I of the Clean Air Act and implemented by 40 CFR Parts 51 and 52 as well as District Regulation 2, Rule 2. (Note: There are additional NSR requirements mandated by the California Clean Air Act.)

Offset Requirement

A New Source Review requirement to provide federally enforceable emission offsets at a specified ratio for the emissions from a new or modified source and any pre-existing cumulative increase minus any onsite contemporaneous emission reduction credits. Applies to emissions of POC, NOx, PM10, and SO2.

Parametric Monitor

Any monitoring device or system required by District permit condition or regulation to monitor the operational parameters of either a source or an abatement device. Parametric monitors may record temperature, gauge pressure, flowrate, pH, hydrocarbon breakthrough, or other factors.

Phase II Acid Rain Facility

A facility that generates electricity for sale through fossil-fuel combustion and by virtue of certain other characteristics (defined in Regulation 2, Rule 6) is subject to Titles IV and V of the Clean Air Act.

POC

Precursor Organic Compounds

PM

Total Particulate Matter

PM10

Particulate matter with aerodynamic equivalent diameter of less than or equal to 10 microns

PSD

Prevention of Significant Deterioration. A federal program for permitting new and modified sources of air pollutants for which the District is classified "attainment" of the National Air

X. Glossary

Ambient Quality Standards. Mandated by Title I of the Act and implemented by both 40 CFR Part 52 and District Regulation 2, Rule 2.

SIP

State Implementation Plan. State and District programs and regulations approved by EPA and developed in order to attain the National Air Ambient Quality Standards. Mandated by Title I of the Act.

SO₂

Sulfur dioxide

Title V

Title V of the federal Clean Air Act. Requires a federally enforceable operating permit program for major and certain other facilities.

TEQ

Toxic Equivalency

VOC

Volatile Organic Compounds

Units of Measure:

bhp	=	brake-horsepower
btu	=	British Thermal Unit
g	=	grams
gal	=	gallon
hp	=	horsepower
hr	=	hour
lb	=	pound
in	=	inches
max	=	maximum
m ²	=	square meter
min	=	minute
mm	=	million
ppmv	=	parts per million, by volume
ppmw	=	parts per million, by weight
psia	=	pounds per square inch, absolute
psig	=	pounds per square inch, gauge
scfm	=	standard cubic feet per minute
yr	=	year

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X. Glossary

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XI. APPLICABLE STATE IMPLEMENTATION PLAN

See Attachments